

IN THE CLAIMS:

1. (Previously presented) An instrument for inserting an implant in a space between adjacent bony portions, comprising:

a housing;

a pair of opposing guide members coupled to said housing, each of said pair of guide members including a body with an outer surface and an opposite guide surface and an elongated slot opening therebetween, said slot extending along said respective guide member, the implant being positionable between said guide surfaces;

a spreader positioned between said pair of guide members, said spreader including a central body and a pair of opposite wings extending therefrom, each wing being slidably received in said slot of a corresponding one of said pair of guide members;

a drive member coupled to said spreader and operable to forwardly advance said spreader and the implant positioned forwardly of said spreader toward distal ends of said guide members, wherein:

said housing includes a coupling portion and a drive member engaging portion extending proximally from said coupling portion, said drive member engaging portion and said coupling portion including a passage extending therethrough for receiving said drive member;

said drive member includes a shaft threadably engaged in said passage and a handle at a proximal end of said shaft; and

further comprising an implant holder extending through said drive member and said spreader, said implant holder including an adjustment knob at a proximal end thereof and a distal end extending distally of said spreader.

Claims 2-4 (Cancelled)

5. (Previously presented) The instrument of claim 1, wherein said handle of said drive member includes a proximally opening recess; and said adjustment knob of said implant holder is rotatably received in said recess.

6. (Original) The instrument of claim 1, wherein said pair of guide members each include an abutment member adjacent said distal end thereof, said abutment member projecting from said outer surface of said respective guide member.

7. (Original) The instrument of claim 6, wherein said abutment members are each orthogonally oriented relative to a central axis of said respective guide member.

8. (Currently amended) An instrument for inserting an implant in a space between adjacent bony portions, comprising:

a housing;

a pair of opposing guide members coupled to said housing, each of said pair of guide members including a body with an outer surface and an opposite guide surface and an elongated slot opening therebetween, said slot extending along said respective guide member and said slot extending through said outer surface and said opposite guide surface of said respective guide member, the implant being positionable between said guide surfaces;

a spreader positioned between said pair of guide members, said spreader including a central body and a pair of opposite wings extending therefrom, each wing being slidably received in said slot of a corresponding one of said pair of guide members; and

a drive member coupled to said spreader and operable to forwardly advance said spreader and the implant positioned forwardly of said spreader toward distal ends of said guide members, wherein said pair of guide members each include an abutment member adjacent said distal end thereof, said abutment member projecting from said outer surface of said respective guide member and said abutment members are each orthogonally oriented relative to a central axis of said respective guide member and each of said slots extends through said abutment member of said respective guide member.

9. (Previously presented) The instrument of claim 8, wherein each of said guide members includes a support member extending distally of said abutment member thereof, said support members being positionable in the space between the adjacent bony portion with said abutment members in contact with respective ones of the adjacent bony portions, said support

members being contactable with the adjacent bony portions to distract the adjacent bony portions as said spreader and said implant are advanced toward said distal ends of said guide members.

10. (Currently amended) An instrument for inserting an implant in a space between adjacent bony portions, comprising:

a housing;

a pair of opposing guide members coupled to said housing, each of said pair of guide members including a body with an outer surface and an opposite guide surface and an elongated slot opening therebetween, said slot extending along said respective guide member and extending through said outer surface and said guide surface thereof, the implant being positionable between said guide surfaces;

a spreader positioned between said pair of guide members, said spreader including a central body and a pair of opposite wings extending therefrom, each wing being slidably received in said slot of a corresponding one of said pair of guide members; and

a drive member coupled to said spreader and operable to forwardly advance said spreader and the implant positioned forwardly of said spreader toward distal ends of said guide members, further comprising an adapter releasably engageable along a distal end wall of said spreader.

11. (Original) The instrument of claim 10, wherein said adapter includes a body portion and a pair of arms extending proximally from opposite ends of said body portion, said pair of arms being positionable along sidewalls of said spreader to engage said adapter to said spreader.

12. (Original) The instrument of claim 11, wherein each of said arms includes a projection at a distal end thereof, said projections extending toward one another and are removably positionable in an adjacent detent in said sidewalls of said spreader.

13. (Original) The instrument of claim 11, wherein said spreader includes a proximally extending central receptacle in said distal end wall, and said adapter body portion includes a central proximally offset portion received in said receptacle.

14. (Original) The instrument of claim 13, wherein said spreader includes a bore extending therethrough and said adapter includes a hole in said central offset portion aligned with said bore of said spreader, said implant holder distal end extending through said bore and said hole to engage the implant forwardly of said adapter.

15. (Previously presented) An instrument for inserting an implant in a space between adjacent bony portions, comprising:

a housing;

a pair of opposing guide members coupled to said housing, each of said pair of guide members including a body with an outer surface and an opposite guide surface and an elongated slot opening therebetween, said slot extending along said respective guide member, the implant being positionable between said guide surfaces;

a spreader positioned between said pair of guide members, said spreader including a central body and a pair of opposite wings extending therefrom, each wing being slidably received in said slot of a corresponding one of said pair of guide members; and

a drive member coupled to said spreader and operable to forwardly advance said spreader and the implant positioned forwardly of said spreader toward distal ends of said guide members, wherein said housing comprises a coupling portion including a pair of upper fingers each defining a proximally opening receptacle and a pair of lower fingers each defining a proximally opening receptacle.

16. (Original) The instrument of claim 15, wherein each of said guide members includes a proximal end adapted to be positioned between a corresponding pair of said upper and lower fingers, said guide members each further including a crossbar rotatably and removably received in said receptacles defined by said corresponding pair of fingers.

17. (Currently amended) An instrument for inserting an implant in a space between adjacent bony portions, comprising:

a housing;

a pair of opposing guide members coupled to said housing, each of said pair of guide members including a body with an outer surface and an opposite guide surface and an elongated

slot opening therebetween, said slot extending along and extending through said outer surface and said guide surface of said respective guide member, the implant being positionable between said guide surfaces;

a spreader positioned between said pair of guide members, said spreader including a central body and a pair of opposite wings extending therefrom, each wing being slidably received in said slot of a corresponding one of said pair of guide members; and

a drive member coupled to said spreader and operable to forwardly advance said spreader and the implant positioned forwardly of said spreader toward distal ends of said guide members, wherein said wings each include a body extending from said central body and an enlarged outer end, said enlarged outer end being sized to capture said wing in said slot of said guide member in which said wing is received.

18. (Original) The instrument of claim 17, wherein each of said slots includes an enlarged proximal end opening adapted to permit passage of said enlarged outer end of said wing therethrough.

19. (Original) The instrument of claim 1, wherein said guide surfaces are planar.

20. (Currently amended) An instrument for inserting an implant in a space between adjacent bony portions, comprising:

a housing;

a pair of opposing guide members coupled to said housing, each of said pair of guide members including a body with an outer surface and an opposite guide surface, the implant being positionable between said guide surfaces, wherein said guide surfaces face one another, and said guide members each include an outer surface opposite said guide surface thereof, and said guide members each include a slot that extends through said guide surface and said outer surface thereof;

a spreader positioned between said pair of guide members;

an adapter releasably coupled to said spreader with a body portion of said adapter along a distal end wall of said spreader; and

a drive member coupled to said spreader and operable to forwardly advance said spreader and adapter with the implant positioned forwardly of said adapter toward distal ends of said guide members, said adapter spacing the implant forwardly of said distal end wall of said spreader.

21. (Currently amended) The instrument of claim 20, wherein ~~each of said pair of guide members includes an elongated slot opening between said outer surface and said guide surface,~~ said slot of each of said guide members extends ~~extending~~ along a central axis of said respective guide member.

22. (Original) The instrument of claim 21, wherein said spreader includes a central body and a pair of opposite wings extending from said central body slidably received in said slot of a respective one of said pair of guide members.

23. (Original) The instrument of claim 20, wherein said adapter includes a pair of arms extending proximally from opposite ends of said body portion, said pair of arms being positionable along sidewalls of said spreader to engage said adapter to said spreader.

24. (Original) The instrument of claim 23, wherein each of said arms includes a projection at a distal end thereof, said projections extending toward one another and being removably positionable in an adjacent detent in said sidewalls of said spreader.

25. (Original) The instrument of claim 20, wherein said spreader includes a proximally extending central receptacle in said distal end wall, and said adapter body portion includes a central proximally offset portion received in said receptacle.

26. (Original) The instrument of claim 25, wherein said spreader includes a bore extending therethrough and said adapter includes a hole in said receptacle aligned with said bore of said spreader.

27. (Original) The instrument of claim 26, further comprising an implant holder extending through said bore and said hole to engage the implant forwardly of said adapter.

28. (Original) The instrument of claim 27, wherein said implant holder includes an elongated shaft received through a passage extending through said drive member.

29. (Original) The instrument of claim 20, wherein at least one of said guide members is pivotally coupled to said housing, said at least one guide member being pivotal away from the other of said guide members to permit said adapter to be engaged to said spreader.

30. (Currently amended) A method for inserting an implant in a space between adjacent bony structures, comprising:

providing an implant inserter comprising:

a housing;

a pair of opposing guide members coupled to the housing;

a spreader positioned between the pair of guide members, the spreader including a central body and a pair of opposite wings extending therefrom slidably received in a slot formed along a central axis of a respective one of the pair of guide members wherein the guide members each include a guide surface, the guide surfaces facing one another, and the guide members each include an outer surface opposite the guide surface thereof, and the slot of each guide member extends through the guide surface and the outer surface thereof;

a drive member coupled to the spreader and the drive member engaging portion;
pivoting at least one of the pair of guide members away from the other of the pair of guide members to remove the wing from the slot of the at least one guide member;
positioning an implant between the pair of guide members and forwardly of the spreader;
and

pivoting the at least one guide member toward the other guide member to position the wing of the spreader in the slot of the at least one guide member.

31. (Original) The method of claim 30, wherein the slot includes an enlarged proximal end opening and pivoting the at least one guide member positions the implant in the enlarged proximal end opening of the slot.

32. (Original) The method of claim 30, further comprising coupling an adapter along a distal end wall of the spreader before positioning the implant.

33. (Original) The method of claim 32, wherein coupling the adapter includes engaging proximally extending arms of the adapter to sidewalls of the spreader.

34. (Original) The method of claim 32, further comprising engaging the implant with an implant holder, the implant holder including a distal end extending distally of the adapter, a shaft extending through the drive member, and a proximal end with an adjustment member.

35. (Original) The method of claim 32, further comprising selecting the adapter from a set of adapters.

36. (Original) The method of claim 30, further comprising engaging the implant with an implant holder, the implant holder including a distal end extending distally of the spreader, a shaft extending through the drive member, and a proximal end with an adjustment member.

37. (Original) The method of claim 30, further comprising:
positioning distal support members of the guide members in the space;
manipulating the drive member to distally advance the spreader and implant between the guide members toward the space; and
distracting the disc space with the support members as the distal advancement of the implant and spreader move the guide members away from one another.

38. (Currently amended) The method of claim 37, further comprising distally advancing the implant ~~in~~ into the space until the wings contact the adjacent bony portions.

39. (Original) The method of claim 38, further comprising withdrawing the support members from the space between the implant and the adjacent bony portions by manipulating the drive member to push the wings against the adjacent bony portions thereby proximally displacing the guide members relative to the bony portions and the implant.

40. (Original) The method of claim 30, further comprising selecting the upper and lower guide members from a set of guide members.

41. (Currently amended) An instrument for inserting an implant in a space between adjacent bony portions, comprising:

a housing;

a pair of opposing guide members extending distally from said housing, said pair of guide members each including an elongated body with an outer surface and an opposite inner surface facing the inner surface of the other guide member with the implant being positionable between said inner surfaces, said guide members further each including a distally extending elongated slot extending between and opening through ~~along~~ said inner surface and said outer surface of said guide member;

a central body between said pair of guide members, said central body including opposite wings extending therefrom slidably received in respective ones of said slots of said guide members; and

a drive member extending from said central body that is operable to forwardly advance said central body and the implant positioned between said guide member toward distal ends of said guide members.

42. (Previously presented) The instrument of claim 41, wherein said housing includes a coupling portion and a drive member engaging portion extending proximally from said coupling portion, said drive member engaging portion and said coupling portion including a passage extending therethrough for receiving said drive member.

43. (Previously presented) The instrument of claim 41, wherein said drive member includes a shaft threadingly engaged in a passage of said housing and a handle at a proximal end of said shaft.

44. (Previously presented) The instrument of claim 43, further comprising an implant holder extending through said drive member and said central body, said implant holder including an adjustment knob at a proximal end thereof and a distal end extending distally of said central body for engagement with the implant.

45. (Previously presented) The instrument of claim 41, wherein said pair of guide members each include an abutment member adjacent said distal end thereof, said abutment member projecting from said outer surface of said respective guide member.

46. (Previously presented) The instrument of claim 45, wherein said abutment members are each orthogonally oriented relative to a central axis of said respective guide member.

47. (Previously presented) The instrument of claim 45, wherein said slots extend through said abutment member of said respective guide member.

48. (Previously presented) The instrument of claim 45, wherein each of said guide members includes a support member extending distally of said abutment member thereof, said support members being positionable in the space between the adjacent bony portion with said abutment members in contact with respective ones of the adjacent bony portions.

49. (Previously presented) The instrument of claim 41, wherein:
said housing comprises a coupling portion including a pair of upper fingers each defining a proximally opening receptacle and a pair of lower fingers each defining a proximally opening receptacle; and

each of said guide members includes a proximal end adapted to be positioned between a corresponding pair of said upper and lower fingers, said guide members each further including a

crossbar rotatably and removably received in said receptacles defined by said corresponding pair of fingers.

50. (Previously presented) The instrument of claim 41, wherein said wings each include a body extending from said central body and an enlarged outer end, said enlarged outer end being sized to capture said wing in said slot of said guide member in which said wing is received.

51. (Previously presented) The instrument of claim 50, wherein each of said slots includes an enlarged proximal end opening adapted to permit passage of said enlarged outer end of said wing therethrough.

52. (Previously presented) The instrument of claim 41, wherein said inner surfaces are planar.

53. (Previously presented) The instrument of claim 41, wherein each of said slots includes a distal end located proximally of a distal end of said guide member along which said slot extends.

54. (Currently amended) An instrument for inserting an implant in a space between adjacent bony portions, comprising:

a housing;

a pair of opposing guide members extending distally from said housing, said pair of guide members each including an elongate body with an outer surface and an opposite inner surface facing the inner surface of the other guide member, said guide members further each including an elongated slot extending between and opening ~~through~~ ~~along~~ said inner surface and said outer surface thereof with the implant being positionable between said guide surfaces, each of said guide members further including an abutment member adjacent a distal end thereof with said slot of said guide member extending through said abutment member, said abutment members being positionable in contact with the adjacent bony portions;

a central body between said pair of guide members, said central body including opposite wings extending therefrom slidably received in respective ones of said slots of said guide members; and

a drive member extending proximally from said central body through said housing, said drive member being operable to advance said central body and the implant between said guide members toward said distal ends of said guide members.

55. (Previously presented) The instrument of claim 54, wherein each of said slots includes a distal end between said abutment member and said distal end of said guide member along which said slot extends.